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ABSTRACT

A telephone survey conducted in Lansing, Michigan, in 1976, which segmented voters according to their orientations on a proposed state bill to ban nonreturnable beverage bottles, is described in this paper. First, background is presented on the issue of returnable versus nonreturnable bottles, the main provisions of the proposed bill are listed, and campaigns by opponents and proponents of the bill are discussed. The survey--in which 305 adults were questioned about their preferences regarding beverages and containers, reasons for opposing or favoring the bottle bill, exposure to information about the bill, and voting intentions--is then described. Results are reported in tabular and narrative form; differences are noted between bottle bill supporters, opponents, and those who were undecided, and the way respondents' opinions relate to three factors--convenience, protection of the environment, and product cost--is shown. Among the findings were that returnable bottles (preferred by 45% of soft drink buyers and 22% of beer drinkers) were preferred because of low price and environmental reasons, and that throwaway bottles and cans were preferred because of ease of disposal and storage, convenience, and--in the case of cans--their ability to get cold. (GW)

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Public Relations Division

AN APPROACH TO IDENTIFYING PUBLICS OF A CAMPAIGN TO BAN NON-RETURNABLE BOTTLES

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AN APPROACH TO IDENTIFYING PUBLICS OF A CAMPAIGN TO BAN NON-RETURNABLE BOTTLES*

INTRODUCTION

It is widely accepted among public relations practitioners that the primary purpose of public relations communication is to change or maintain desired attitudes or behaviors among intended recipients. Robinson (1968) has pointed out that to do this effectively, the public relations practitioner must understand intended recipients' attitudes toward the object of communication. This can help to avoid the pitfalls of incorrect assumptions by anticipating audience reactions.

The successful practitioner rarely can think in terms of one homogeneous public. Ehling (1975) pointed out that the practitioner usually needs to think in terms of several publics, for people tend to align themselves differently with respect to most issues. Unfortunately, it is often difficult to differentiate between various publics in ways which could be useful to the potential communicator.

Marketing literature offers some methods with potential for the field of public relations. Engle et al. (1972) presented numerous approaches to market segmentation. All are means of dividing heterogeneous masses of people into smaller groups sharing common characteristics. Three segmentation techniques have been common in marketing: geographic segmentation, demographic segmentation, and "volume" segmentation (dividing a market according to the amount of a product consumed). All of these methods involve the use of convenient, easy-to-measure characteristics of people. But none helps explain why individuals think or behave as they do with respect to the issue or product of concern.

*This study was conducted while the author was an Assistant Professor in the Department of Advertising at Michigan State University.

Haley (1968) described an approach called "benefit segmentation" which segments on the basis of benefits and deficits people associate with use of a product. Although benefit segmentation would not be applicable to all public relations situations, it could be a useful aid in trying to understand and communicate with voters. People certainly will not react positively to a public relations campaign or vote for an issue or candidate if they see no benefit in it. And that benefit can be one of the most effecive bases for communication with voters.

This paper will demonstrate how the voters on one referendum issue can be segmented according to perceived benefits and deficits associated with the object of the election. The referendum issue was the proposal to ban non-returnable beverage containers in Michigan which appeared on the ballot in the 1976 general election. The methodology used here could be generalized to many public relations situations in which publics need to be identified in order to improve effectiveness of communication.

To understand the complexity of the bottle bill issue, some general background is needed.

BACKGROUND

The history of no-deposit containers illustrates the speed with which former luxuries can become "necessities" in the minds of convenience-oriented Americans. As recently as 1960, 50 percent of the beer and fully 95 percent of soft drinks sold in the U.S. were sold in refillable bottles (Sullivan, 1977). Large numbers of non-refillable beverage containers began to appear on retailers' shelves about 15-20 years ago. They certainly seemed more convenient, but they cost about 30-40 percent more than refillables (Mckee, 1976).

By 1975, Americans purchased over 65 billion throwaway beverage containers, accounting for over 80 percent of beer and 66 percent of soft drink containers. And the volume continues to increase: it has been estimated that, by 1980, over 90 billion throwaways will be sold annually, consuming 1.7 million tons of steel, 8.2 million tons of glass and 643,000 tons of aluminum.

Unfortunately, only a small proportion of those materials is recovered to be used again. In 1975, less than 16 percent of aluminum beverage containers were recycled. The figures for steel and glass (below 5%) were even more disappointing (Sullivan, 1977).

There appears to be little incentive for many people to put empty containers into trash receptacles. The Environmental Protection Agency has estimated that 4.1 billion soft drink and beer containers ended up as litter in 1975. This comprised 20-30 percent of all litter by piece count and 40-60 percent by volume. Municipal and state funds must be spent if this trash is to be cleaned up. The Michigan State Highways Department alone budgets $1.5 million annually for cleanup along major highways (Mckee, 1976).

In reaction to the problems caused by throwaway beverage containers, a few states and local governments have enacted "bottle bills" -- measures requiring a minimum deposit on all beverage containers. In 1972, the Oregon legislature enacted the first bottle bill. Two other states followed Oregon's lead and passed bottle bills in following years. In addition, five Canadian provinces have deposit laws.

Returnable bottle legislation was first introduced in the Michigan legislature in 1965, but for many years didn't emerge from committee. Yet, public opinion in Michigan appeared to be strongly in favor of such legislation. In July, 1975, a statewide survey showed that 73 percent of state residents favored a bottle law (Paden et al., 1977).

In 1975, the annual convention of the Michigan United Conservation Clubs (MUCC), the Michigan affiliate of the National Wildlife Federation, passed a resolution directing its staff to work for a statewide referendum on a bottle bill. MUCC drafted a petition and sent copies to its 100,000 members as an insert to its magazine, Michigan Out-of-Doors. Various environmental and other organizations, such as the Michigan Farm Bureau, helped distribute petitions. Approximately 12,000 people circulated petitions, and over 400,000 signatures were obtained, 188,000 more than needed. The "Help Abolish Throwaways" Committee (HAT) was formed to coordinate the statewide efforts of the diverse groups supporting the measure (Paden et al., 1977).

The main provisions of the bill were:

--Beer and soft drinks could not be sold in non-returnable containers.

--Beer and soft drinks could not be sold in cans with detachable metal rings.

--A manufacturer could use standard containers that all other manufacturers could also use. Or a manufacturer could use non-standard containers. Consumers would pay five cents refundable deposit on standard containers, and ten cents deposit on non-standard containers.

--Each dealer would have to accept and pay full deposit on all types of containers which that dealer sold.

--The law would take effect two years after the election.

This proposed law was not without its opponents. Years earlier, the nationwide "Keep America Beautiful" organization was formed by the container industry to slow the spread of such laws by encouraging people not to litter and directing attention away from the containers which comprised a large proportion of the litter. In Michigan, the beverage and container industries formed an alliance to fight the bill called "The Committee Against Forced Deposits" (CAFD). In addition to the beverage and container industries, the bottle bill was opposed by beverage wholesalers and retailers, some (though not all) labor unions,

the Michigan Chamber of Commerce, and several retail organizations. A prominent Detroit public relations firm directed the statewide CAFD campaign.

CAFD waged a powerful media campaign throughout the fall before the 1976 election in an effort to defeat the bill. After the campaign, CAFD reported $1.3 million in statewide campaign expenditures. Taking into account the expenditures of local CAFD units, retailers, wholesalers and large supermarkets who were not required by law to report their expenses, it has been estimated that total opposition expenditures were close to $3 million.

In contrast, election records show that HAT spent a total of $117,000 during the campaign, of which $45,000 was collected from donations, and $72,000 came from the MUCC general fund (Paden et al., 1977).

The CAFD strategy was to buy large amounts of television, radio and newspaper advertising to convince voters of the negative effects of the bill. These advertisements argued, among other things, that: the bottle bill would raise the cost of beverages; that it would cause great inconvenience to consumers by forcing them to store bottles at home and to return them to stores; that it would force consumers to stand in long lines to get deposits back, that it would not cut down on litter; that beverage containers are not a significant contributing factor to litter problems; that it would not save energy or resources; that it would cause unemployment; that it would eliminate consumers' freedom of choice; that similar bills have failed in other states; that the best solution to the problem would be to educate people not to litter; and that more state financial aid for roadside cleanups was needed.

Lacking the financial resources of CAFD, HAT attempted to reach voters through local organizations and free press coverage. The statewide campaign had one advantage in that the press generally supported the bottle bill editorially, but in Lansing the State Journal and local television stations vigorously opposed the measure.

HAT staged many publicity events to gain press coverage. HAT people participated in radio talk shows, distributed pamphlets, buttons, bumper stickers and other paraphanalia, sent out numerous press releases to news media across the state, and obtained some free television and radio advertising under the Fairness Doctrine. They also spent $20,000 on paid radio, television and newspaper ads.

The result of these campaigns was a steady stream of advertising and news stories which increased in intensity until election day. The electorate certainly should have been thoroughly informed on the issue. There is evidence that the massive publicity campaign mounted by CAFD had an effect on the voters: voter support for the bill dropped from 73 percent in July, 1975, to 59 percent at the end of October, 1976. Yet, on election day, the voters of Michigan, along with those of Maine, became the first to pass a bottle bill by popular vote.

DEFINING THE BOTTLE BILL ISSUE

Decision making by individuals in the public on complex social issues may involve innumerable ways of looking at a problem. Research which attempts to understand these situations is difficult because alternatives as conceptualized by public opinion researchers may not exist in an individual's mind. The use of pre-formulated items in questionnaires makes it difficult to reflect a variety of respondent viewpoints, and they may affect the respondent's answers by providing him with information which he may use in answering the questions.

Edelstein (1973) has pointed out these problems, and has developed a methodology which permits the researcher to observe the ways in which individuals deal with complex issues in their own terms. To do this, the researcher must <u>not</u> give the respondent information with which to value the object being considered, and he must encourage the respondent

to state in his own terms what problem is important to him at a given time, why that problem is important, and possible solutions to the problem. For a fuller explanation of this methodology, see Edelstein (1974).

In voting decisions such as referenda, however, the voters' choices are constrained. The voter can vote for or against an issue or candidate, or he may not vote. The deluge of news stories and advertisements which commonly precede an election may narrow the individual's focus, but he is not constrained in the reasons he may have for making his decision.

This study attempted to reflect respondents' orientations to a problem with many complex attributes, but with limited, predetermined solutions for the individual. The study encouraged respondents to describe their orientations to the bottle bill in their own terms, and to react to some of the common arguments made about beverage containers and their use. These results were related to voting decisions. Finally, voters were "segmented" according to their orientations to the bottle bill in an attempt to define target audiences in a way which could be functionally useful to the communicator.

METHODOLOGY

Data for the study were gathered in a telephone survey of adult residents of the metropolitan area of Lansing, Michigan. A total of 305 usable interviews were completed during the period of October 25 - 31, 1976 -- a week before the 1976 general election. The study was designed as a project for an undergraduate public relations class at Michigan State University.

Because the study's primary purpose was to identify and understand types of voters, rather than to accurately predict the outcome of the

election, no extraordinary efforts were made to achieve a sample which would precisely represent all voters in Michigan or even the Lansing-area electorate. Limitations of time and cost precluded that degree of accuracy. Yet, it was gratifying to note that, among those who said they intended to vote in the coming election, 64 percent said that they would vote for the bottle bill. The statewide election results showed 63 percent voting for the bill.

Respondents were asked open-end questions about their preferences in beverages and containers, reasons for their preferences, amounts consumed, arguments for and against the bottle bill, content and levels of exposure to news stories, advertising and interpersonal sources of information, and voting intentions. Respondents were then asked to give reactions to a set of statements about beverage containers and the proposed bottle bill. Finally, respondents who said they were against the bill or were undecided were presented with the major provisions of the bill. After hearing these, they were asked how they would vote.

RESULTS

Beer and soft drink purchasing behaviors showed considerable differences both in the types of beverage containers purchased and in types preferred. Whereas nearly a third of soft drink purchasers bought 16 oz. returnable bottles, along with 5 percent each for 12 and 32 oz. returnables, only nine percent of beer purchasers bought beer in 12 oz. returnables (Table 1). Twelve oz. cans were the runaway favorite among beer purchasers, with seven out of ten beer purchasers buying beer in cans.

There appeared to be discrepancies between people's preferences and their buying behaviors. Among soft drink buyers, nearly half (45%) said that they preferred to buy returnables, with only 15 percent saying they preferred cans. Although only about one in ten beer purchasers said

they bought returnables, nearly a quarter (22%) said that they preferred returnable beer bottles (Table 2). This suggests that considerably more beer would be sold in returnables if they were readily available.

Soft drink and beer purchasers who expressed a preference in containers were asked why they preferred that container. The patterns were similar for both groups. Returnables were preferred among both soft drink and beer purchasers because of their low price (30% and 15%) and for environmental reasons (31% and 21%) (Table 3). Throwaway bottles were preferred because of their convenience (30% and 18%). Among beer purchasers, throwaway bottles were frequently mentioned as being all that is available (18%).

For soft drink and beer purchasers who preferred cans, the most frequently mentioned reasons were ease of disposal (26% and 10%), ease of storage (23% each), convenience (15% each), and their ability to get cold (10% and 9%). The biggest drawback for returnables, in consumers' minds, appears not to be the deposit itself. Rather, many people seem to prefer cans because of their ease of storage and disposal. The low price of returnables appears to be about as important as environmental considerations for those who prefer them.

Supporters of the bottle bill appear to have been aided by one important tendency among voting age adults in the Lansing area: those who intended to vote in the general election were much more likely to favor the bottle bill than those who did not intend to vote (Table 4). There seemed to be an irresistible urge among respondents to exaggerate voting intentions: 86 percent of the sample said that they intended to vote in the election. Yet, as noted above, among those who said they intended to vote, the proportion who said that they would vote for the bottle bill (64%) was very near the final statewide election result (63%). Among those who said they would not vote or didn't know, only 21 percent said they favored the bill, with more than half claiming to be undecided.

Education proved to be the only demographic characteristic which was strongly related to voting intentions among voters. Liklihood of voting for the bill increased sharply among the more highly educated groups. While fewer than half of those with high school education said they would vote for the bill, fully 84 percent of those with graduate school education said they would do so (Table 5). Although younger (under 30) voters were somewhat more likely to support the bill than were other age groups, there were no strong overall differences. Among occupation groups, students and educators were most likely to support the bill, while those in management positions were less likely. Finally, while males were somewhat more likely to support the bill than females, the difference was not statistically significant.

Demographic characteristics proved to be weak predictors of voting intentions, but there were other differences betweeen the groups which could prove to be much more valuable to those wishing to communicate with one or more of the groups.

Supporters of the bottle bill tended to be more articulate about the bill; over half of the supporters cited two or more arguments for the bill, while only 18 percent of those against it did so (Table 6). All three groups cited the same average number of arguments against the bottle bill (1.5), while supporters of the bill, on average, were able to give more arguments for it (1.6) than those who intended to vote against it (0.9) or those who were undecided (1.0).

The most frequently cited arguments for the bill among both supporters and opponents were litter reduction (74% and 62%), reduced use of resources or energy (48% and 24%), and lower beverage cost (13% and 6%) (Table 7). Among those who were undecided, the most common responses were litter reduction (71%) and reduced use of energy or resources (18%).

All three groups seemed equally aware of the arguments against the bill. The most frequently cited argument among all three was the

possible rise in beverage costs (41%-54%). Those who supported the bill were much more likely to mention loss of jobs (43%) than either those against the bill (15%) or those who were undecided (7%). Other frequently cited arguments among all groups were prospects of waiting in long lines (10-20%) and general inconvenience (7-15%). Few among the voters cited the argument, frequently made by bottle bill opponents, that the returnable bottles do not save energy or resources. But those who were undecided about the bill were more likely to question whether the bill would solve the litter problem (29%) than either those opposed to the bill (17%) or those supporting it (8%).

Bottle bill supporters, opponents and those undecided all appear to have been well exposed to information about the bill. About three-quarters or more of each group had seen or heard at least some news stories or ads for or against the bill (Table 8). There were no statistically significant differences between the groups. Supporters of the bill, however, were much more likely to have talked about the bill with others, and so were exposed to an additional -- and seemingly more credible -- source of information.

All respondents were asked to react to a series of 14 opinion statements having to do with use of beverage containers. They were given a five-point scale by which they were to indicate their degree of agreement or disagreement.[1] All items were pretested on a group of undergraduate students before being selected for inclusion in the final questionnaire. The wording of each item, along with mean scores given by the three voting groups, are presented in Table 9.

On most of the statements, the mean scores of the undecideds fell somewhere between those of the bill's supporters and opponents. The greatest differences between supporters and opponents of the bill

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[1]The five-point scale was as follows: (-2) strongly disagree; (-1) disagree; (0) neither agree nor disagree; (1) agree; (2) strongly agree.

appeared on statements related to convenience or environmental concerns.[2] One can assume that supporters were already convinced of the merits of the bill, so the most useful outcome of a segmentation analysis would be to clearly differentiate undecideds from opponents. One then can attempt to direct communication to the undecideds and perhaps convince a few opponents as well.

Those opposed and those undecided about the bill did not differ significantly on the items related to convenience (items 6, 7 and 8), but there were significant differences on most items related to the environment (items 10-14). In each case where differences were significant, the mean score for undecideds was between that of the supporters and opponents. (See Table 9.)

During the weeks before the Michigan election, some proponents of the bottle bill had argued that the voting public was being inundated with untruthful information by the barrage of advertising against the bill, and that this could affect the outcome of the election. If only voters were aware of the provisions of the bill, it was argued, they would agree with it and vote for it. Data in this study do not support that argument.

Those who said they would vote against the bill or were undecided were read the main provisions of the bill and were asked if they were aware of each provision. Fewer than half were aware that the bill would ban non-returnable containers, or that the bill would encourage standard containers by putting a lower deposit on them. While two-thirds were aware that retailers would have to pay full deposits on all containers sold, more than a third believed that the bill would take effect immediately (Table 10).

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[2] In a t-test not included in this paper, supporters and opponents differed significantly on each item having to do with convenience or environmental concerns -- items 6 - 14.

After hearing these provisions, only about nine percent of those who were originally against the bill or were undecided said that they would now vote for it. That does, however, represent about three percent of voters, and could make a difference in a close election.

BENEFIT SEGMENTATION: A TOOL FOR UNDERSTANDING THE PUBLICS OF THE BOTTLE BILL

Although there were statistically significant differences between voting groups on their mean scores on the opinion scales, the diversity of responses and large number of variables make meaningful generalization difficult. In order to reduce this large number of variables to a smaller number of general orientations to beverage containers, the results were factor analyzed using a principle components solution with varimax rotation. This procedure resulted in the identification of three factors, or clusters of variables, which could be seen as representing benefits that consumers derive from the use of beverage containers. The factors which resulted from this procedure were interpreted by identifying an underlying attribute common to all of the specific opinion statements strongly related to each factor. While the naming of such factors is always subjective, those which emerged from this analysis represented fairly clear-cut benefit orientations to container use: "Convenience," "Environment," and "Value."

The Convenience factor was strongly associated with the following statements: "The best container is one which you can throw away when you're done with it;" "Returning bottles to the store for refunds is too inconvenient for me," and "I think it's too much trouble to save returnable bottles at home."

The Environment factor was related to these statements: "Manufacturing throwaway containers wastes natural resources;" "Manufacturing throwaway containers wastes too much energy;" "I dislike throwaway containers because of the litter problems they create;" "It's a waste of

material to throw bottles and cans away;" and "I sometimes feel a little guilty when I buy throwaway bottles."

The Value factor was strongly associated with these statements: "I think the best container is one which offers more drink for the money;" and "I think drinks cost less in returnable bottles." The other statements about beverage containers were not strongly related to any of the factors.

For each individual respondent, factor scores were calculated which, in effect, created three new variables for each respondent. These new variables represent composite scores of respondents' degree of agreement or disagreement with the underlying dimensions for each factor. The factor scores were calculated by multiplying factor score coefficients by standardized variable scores and summing across all variables. The result for each factor was a distribution with a mean of zero and a standard deviation of one. For further details on methods of calculating factor scores, see Kerlinger (1973, pp. 676-678) or Harmon (1976, pp. 368-376).

In order to compare respondents with high and low scores on each factor, the distribution of scores for each factor was divided at the median, creating two groups of respondents for each factor: one group with relatively high scores on that factor, and one group with relatively low scores. One should remember that, since the factor scores were divided at the observed medians, one individual's score on a particular factor was high or low relative to the scores of other respondents on that factor.

Table 11 shows that the following types of respondents displayed relatively high interest in convenience when using beverage containers: those with high school education or less, those in management positions and those not working, those over fifty years of age, and females. Convenience was of particularly low interest to respondents with graduate school educations, educators, students, and males.

Environment was of particularly high interest to respondents with at least some college, educators, students and the self-employed. It was of low interest to those with high school educations or less, housewives, and those not working.

Value was of high interest to laborers and respondents under 30 years of age, and of surprisingly low interest to those not working and to people over the age of 60.

In order to isolate the kinds of people who were particularly attracted to one benefit or another, benefit segments were created by assigning each respondent to the one factor in which he or she expressed the highest degree of agreement. This process may be somewhat unrealistic in that many people may seek multiple benefits. One individual, for example, might be interested in both convenience and value. While it is possible to isolate such individuals using the same technique, the number of segments rapidly increases. For the purposes of this paper, it is instructive to examine the relative composition of each benefit segment in terms of the types of people attracted most strongly to that benefit.

Overall, few important demographic differences appeared in the profiles of the three segments. The Convenience segment, compared to voters overall, contained more respondents with high school education or less, more housewives and people not working, more over 60 years of age, and more females (Table 12). The Environment segment contained relatively more respondents with at least some college, more professionals and students, and fewer housewives. The Value segment contained a high proportion of those under the age of 30.

While these data showed no striking differences between the benefit segments in demographic profiles, the segments were strongly related to one very important variable: intended vote (Table 13). Among those voters in the Convenience segment, 58 percent said they would vote against the bottle bill, and only 17 percent would vote for it. Fully 93 percent of the Environment segment said they intended to vote for the

bill. And, perhaps more surprisingly, nearly three-quarters of the Value segment would vote for the bill.

CONCLUSIONS

This study was conducted only a few weeks before the election, so its results would have been of limited value to either side of the bottle bill issue. The same methodology, however, could be used well in advance of the planning of communication efforts for an election or other type of public relations campaign.

Robinson (1966, p. 56) argued that public relations objectives should be measurable and translated into problems to be solved. These problems can be summarized as behaviors and/or attitudes of individuals which need to be changed or maintained. The methodology used in this study is adapted from marketing, and provides one way in which the public relations practitioner can identify publics simultaneously with message content and channels.

This study attempted to differentiate publics of a ballot issue proposing to ban the sale of non-returnable beverage containers. Voters were segmented according to benefits sought when using beverage containers. The resulting segments were strongly related to intended vote. By segmenting in this fashion, the communicator can identify potential communication problems, target audience(s), and what should be stressed in the content of messages.

These results suggest that the campaign to pass returnable bottle legislation in Michigan (and possibly in other states) overlooked one very important fact: that returnables cost the consumer less, and that this saving can be an important benefit to the voter. The segments were more polarized on matters of convenience and environmental concerns.

The data also suggest that there was at least one major weakness in the strategy of the groups who attempted to defeat the measure: many voters simply did not believe the arguments that the bottle bill would raise the cost of beverages. In both advertising and public relations, no amount of money spent in a campaign can persuade a disbelieving public.

The findings of this study could be of immediate interest to groups entering into a campaign to support or oppose a bottle bill, but other organizations could find it useful to segment their publics according to benefits which individuals expect to gain from their relationship with an organization.

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Table 1: Types of Beverage Containers Purchased by Buyers of Soft Drinks and Beer. (multiple responses permitted)

Type of Containers:	Purchasers of soft drinks (n=266)	Purchasers of beer (n=177)
12 oz. cans	19%	70%
12 oz. no-deposit bottles	9%	16%
12 oz. returnables	5%	9%
12 oz.(any container)	5%	2%
16 oz. no-deposit bottles	13%	1%
16 oz. returnables	32%	1%
16 oz.(any container)	4%	1%
32 oz. no-deposit bottles	11%	1%
32 oz. returnables	5%	-
32 oz.(any container)	1%	-

Table 2: Types of Beverage Containers Preferred by Buyers of Soft Drinks and Beer.

Preferred Containers:	Purchasers of soft drinks (n=266)	Purchasers of beer (n=177)
Returnable Bottles	45%	22%
No-Deposit Bottles	14	6
Cans	15	50
Anything Available	26	22
	100%	100%

Table 3: Why Specific Beverage Containers are Preferred by Purchasers of Soft Drinks and Beer.

Why Container Preferred:	Container preferred by purchasers of soft drinks: returns (n=120)	no-deposit (n=37)	cans (n=39)	Container preferred by purchasers of beer: returns (n=39)	no-deposit (n=11)	cans (n=88)
Low Price	30%	3%	0%	15%	9%	1%
Taste	6	5	3	5	9	2
Convenience	2	30	15	3	18	15
Ease of Storage	0	0	23	5	0	23
Easy to Throw Away	2	14	26	0	9	10
Cold	0	3	10	0	0	9
Dislike Deposits	0	11	0	0	9	1
Less Trash	7	0	0	0	0	1
Environmental Reasons	31	0	0	21	0	1
Family Preference	2	0	3	0	0	3
Contains Right Amount	0	5	3	0	0	0
Can be Resealed	2	5	0	0	9	0
Only Container Available	0	0	0	0	18	6
General Preference	7	8	3	13	0	11
No Answer	13	16	15	37	18	17
	100%	100%	101%	99%	99%	100%

Table 4: How Respondent Would Vote, by Whether Respondent Expects to Vote.

How Respondent would vote:	Whether Respondent Expects to Vote: Yes (n=262)	No, D.K. (n=43)	Total (n=305)
For	64%	21%	58%
Against	25	23	25
Undecided	11	56	17
	100%	100%	100%

Table 5: Intended Vote, by Respondent Demographic Characteristics (Voters)

		Education:			
Intended Vote:	Total (n=262)	High School (n=93)	Some College (n=73)	College Graduate (n=53)	Graduate School (n=43)
For	64%	48%	62%	79%	84%
Against	25	36	30	11	12
Undecided	11	16	8	9	5
	100%	100%	100%	99%	101%

X^2=24.4; p=.0004

	Occupation:								
Intended Vote:	Labor (n=23)	Self-Emplyd (n=10)	Management (n=11)	Clercl/ Secret. (n=56)	Educator (n=14)	Professional (n=30)	Student (n=28)	Housewife (n=57)	Not Working (n=28)
For	65%	60%	46%	64%	86%	70%	82%	54%	50%
Against	22	30	36	29	7	27	11	28	36
Undecided	13	10	18	7	7	3	7	18	14
	100%	100%	100%	100%	100%	100%	100%	100%	100%

X^2=17.4, p=n.s.

	Age:				
Intended Vote:	Under 30 (n=95)	30-39 (n=51)	40-49 (n=51)	50-59 (n=31)	60 and over (n=31)
For	70%	59%	57%	65%	68%
Against	23	29	28	23	23
Undecided	7	12	16	13	10
	100%	100%	101%	101%	101%

X^2=4.3; p=n.s.

	Sex:	
Intended Vote:	Male (n=99)	Female (n=156)
For	71%	60%
Against	22	26
Unecided	-	14
	100%	100%

X^2=3.9; p=n.s.

Table 6: Number of Arguments For and Against the Bottle Bill, by Intended Vote (Voters)

	Intended Vote:		
Number of Arguments For the Bill:	For (n=168)	Against (n=66)	Undecided (n=28)
None	7%	25%	26%
One	41	57	49
Two or more	52	18	26
	100%	100%	101%
Mean number cited:	1.6	0.9	1.0

X^2=30.0; p=.0001

	Intended Vote:		
Number of Arguments Against the Bill:	For (n=168)	Against (n=66)	Undecided (n=28)
None	11%	12%	21%
One	37	33	25
Two or more	52	55	54
	100%	100%	100%
Mean number cited:	1.5	1.5	1.5

X^2=3.3; p=n.s.

Table 7: Arguments For and Against the Bottle Bill, by Intended Vote (Voters; multiple responses permitted)

Arguments	Intended Vote: For (n=168)	Against (n=66)	Undecided (n=28)
For the Bill:			
Less litter	74%	62%	71%
Use less resources, energy	48%	24%	18%
Lower cost of beverages	13%	6%	0%
Create more jobs	4%	3%	0%
Less trash to dispose	2%	0%	0%
Can't remember any	1%	11%	4%
Mentioned distortion in opponents' advertising	1%	2%	0%
"There are none"	3%	8%	4%
No answer	4%	14%	18%
Arguments Against the Bill:			
Won't solve litter problem	8%	17%	29%
Won't save resources, energy	1%	3%	0%
Higher beverage costs	54%	41%	46%
Loss of jobs	43%	15%	7%
Will cause inconvenience	8%	15%	7%
Will penalize non-litterers	2%	5%	7%
Will have to wait in lines	10%	20%	18%
Don't like to pay deposits	1%	6%	7%
Government interference	3%	2%	4%
Will limit choice	1%	2%	0%
Negative effect on retailers	3%	6%	4%
Will lead to more deposits	3%	9%	4%
Can't remember any	2%	11%	8%
"There are none"	2%	0%	0%
No answer	8%	8%	14%

Table 8: Exposure to Advertising, News Stories and Conversations About the Bill (Voters)

	Intended Vote: For (n=168)	Against (n=66)	Undecided (n=28)
Number of Ads Seen or Heard Supporting the Bill:			
None	23%	22%	28%
Below median (1 - 12)	44	61	38
Above median (13 or more)	33	17	34
	100%	100%	100%
	X^2=4.1; p=n.s.		
Number of Ads Seen or Heard Against the Bill:			
None	14%	9%	23%
Below median (1 - 20)	70	74	62
Above median (20 or more)	16	16	15
	100%	99%	100%
	X^2=2.7 p=n.s.		
Number of News Stories Seen or Heard:			
None	8%	16%	24%
Below median (1 - 12)	36	39	36
Above median (13 or more)	56	45	40
	100%	100%	100%
	X^2=6.5; p=n.s.		
Number of Conversations About the Bill:			
None	21%	38%	64%
Below median (1 - 5)	39	33	18
Above median (6 or more)	39	29	18
	99%	100%	100%
	X^2=23.6; p=.0001		

Table 9: Mean Scores on Opinion Statements*, by Intended Vote (Voters)

Statement:	Mean Scores: For	Against	Undecided	t: (against-undecided)	Sig.
1. The colder a drink tastes, the better I like it.	1.2	1.2	0.8	0.91	.37
2. A drink tastes best right out of the container.	-0.4	-0.2	-0.4	0.45	.66
3. I think a container which can be re-sealed is best.	1.0	0.8	0.7	0.64	.52
4. In my opinion, some containers give a drink a funny taste.	0.7	0.6	0.7	0.73	.47
5. The best container is one which offers more drink for the money.	0.6	0.5	0.0	0.83	.41
6. The best container is one which you can throw away when you're done with it.	-1.4	0.7	0.8	0.11	.91
7. Returning bottles to the store is too inconvenient for me.	-1.3	0.6	0.0	1.72	.09
8. It's too much trouble to save returnable bottles at home.	-1.4	0.5	0.0	1.28	.21
9. I think drinks cost less in returnable bottles.	1.0	-0.1	-0.1	0.52	.60
10. I think manufacturing throwaway containers wastes natural resources.	1.5	0.1	0.9	2.87	.006
11. I think manufacturing throwaway containers wastes too much energy.	1.3	-0.6	0.4	2.88	.006
12. I dislike throwaway containers because of the litter they create.	1.4	-0.1	0.6	2.11	.039
13. To me, it's a waste of materials to throw bottles and cans away.	1.5	0.2	0.6	1.44	.15
14. I sometimes feel a little guilty when I buy throwaway bottles.	0.5	-1.3	-0.5	3.01	.004

*Scale: (-2) strongly disagree; (-1) disagree; (0) neither agree nor disagree; (1) agree; (2) strongly agree

Table 10: Awareness of Provisions of Bottle Bill and Vote After Hearing Provisions of the Bill, Among Those Originally Against the Bill or Undecided.

Awareness of Provisions of Bill:	Total Against or Undecided (n=94)
Aware that non-returnables would be banned	43%
Aware that bottle bill would encourage standard containers	42%
Aware that all retailers must pay full deposit	65%
Believes that bottle bill would take effect immediately	39%

Vote After Hearing All Provisions:	Total Against or Undecided (n=94)	Proportion of Total Voters (n=262)
For	9%	3%
Against	57	21
Undecided	34	12
	100%	

Table 11: General Orientation to Beverage Containers, by Respondent Demographics (all respondents)

		Education:			
Orientation:	Total (n=305)	High School (n=118)	Some College (n=78)	College Graduate (n=58)	Graduate School (n=51)
Convenience:					
High	50%	59%	45%	45%	41%
Low	50	41	55	55	59
Environment:					
High	50%	39%	56%	59%	55%
Low	50	61	44	41	45
Value:					
High	50%	50%	46%	55%	49%
Low	50	50	54	45	51

	Occupation:								
Orientation:	Labor (n=30)	Self-Emplyd (n=12)	Man-agement (n=12)	Clercl/ Secret. (n=59)	Educ-ator (n=17)	Profes-sional (n=32)	Student (n=38)	House-wife (n=67)	Not Working (n=31)
Convenience:									
High	50%	50%	58%	51%	29%	50%	42%	54%	58%
Low	50	50	42	49	71	50	58	46	42
Environment:									
High	60%	67%	42%	59%	65%	50%	61%	33%	39%
Low	40	33	58	41	35	50	39	67	61
Value:									
High	63%	50%	50%	48%	47%	47%	55%	55%	32%
Low	37	50	50	52	53	53	45	45	68

	Age:					Sex:	
Orientation:	Under 30 (n=121)	30-39 (n=53)	40-49 (n=53)	50-59 (n=40)	60 and over (n=33)	Male (n=115)	Female (n=181)
Convenience:							
High	52%	47%	42%	55%	55%	45%	53%
Low	48	53	58	45	45	55	47
Environment:							
High	50%	60%	51%	43%	46%	58%	46%
Low	50	40	49	57	54	42	54
Value:							
High	60%	43%	57%	45%	27%	51%	50%
Low	40	57	43	55	73	49	50

Table 12: Profile of Container Use Segments* (Voters)

		Highest Score On:		
Education:	Total (n=262)	Convenience (n=65)	Environment (n=93)	Value (n=94)
High School	35%	50%	22%	37%
Some College	27	24	34	21
College Graduate	21	14	22	25
Graduate School	18	12	23	17
	101%	100%	101%	100%
Occupation:				
Labor	10%	8%	10%	11%
Self-Employed	4	3	5	3
Management	4	6	4	3
Clerical/Secretarial	22	21	22	23
Educator	5	5	7	4
Professional	12	9	17	8
Student	11	3	15	12
Housewife	22	27	13	27
Not Working	10	18	7	9
	100%	100%	100%	100%
Age:				
Under 30	38%	32%	37%	43%
30 - 39	20	22	24	16
40 - 49	19	15	14	26
50 - 59	11	11	14	9
60 and over	12	20	12	7
	100%	100%	101%	101%
Sex:				
Male	40%	31%	45%	40%
Female	60	69	55	60
	100%	100%	100%	100%

Table 13: Intended Vote, by Container Use Segments* (Voters)

	Highest Score On:		
Intended Vote:	Convenience (n=66)	Environment (n=90)	Value (n=89)
For	17%	93%	73%
Against	58	6	19
Undecided	26	1	8
	101%	100%	100%

X^2=102.6; p=.0001

*Segments are factors (i.e., general orientations to beverage containers) on which respondents had highest factor scores.